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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,769	11/15/2001	Allen J. Nejezchleb	SAIC0020-CON	7954

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EXAMINER

MAYEKAR, KISHOR

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/987,769

Applicant(s)

NEJEZCHLEB ET AL.

Examiner

Kishor Mayekar

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-11, 13-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-11, 13-17 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 18 February 2005 has been entered.

### ***Specification***

2. The abstract of the disclosure is objected to because it is more than 150 words. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 8-11, 13-17 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers et al. (6,139,694) in view of either Alix et al. (6,117,403) or Ruan et al. (6,565,716). Rogers' invention is directed to an apparatus for converting nitric oxide in an exhaust gas into nitrogen dioxide (col. 2, lines 19-32). Rogers discloses that the apparatus comprises a plasma reactor having a plurality of dielectrically-coated electrodes defining at least one reaction zone configured to receive gas, and a voltage supply connected to each of the dielectrically-coated electrodes (see Fig. 1). Rogers also discloses each of the dielectrically-coated electrodes has an electrode plate coated with a fluoropolymeric material, such as Teflon® and Teflon® PFA (col. 4, lines 20-36). The differences between Rogers and the above claims are the electrode plate being not completely enclosed within the fluoropolymeric dielectric, and the dielectric strength value of the fluoropolymeric dielectric.

As to the first difference, Alix shows in an electrical discharge the provision of an enclosed dielectrically-coated electrode (Fig. 4). Ruan shows the same in an electrical discharge (col. 4, lines 15-21 and Figs. 8-10). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have replaced Rogers' dielectrically-coated

electrodes with each of the secondary references' dielectrically-embedded electrodes because the substitution of art recognized equivalents as shown by each of the secondary references would have been within the level of ordinary skill in the art.

As to the second difference, since Rogers discloses the use of a fluoropolymeric material, such as Teflon® and Teflon® PFA as the dielectric material, Rogers' dielectric material has a dielectric strength with a value as claimed.

As to the process limitation of each of claims 13-16 and 19, Rogers discloses each of the limitations in col. 5, lines 30-40 and lines 56-61 and col. 7, line 38 through col. 8, line 13, and Fig. 7.

As to the subject matter of claim 19, Rogers discloses the limitations in col. 4, lines 30-36 and Fig. 7.

### ***Double Patenting***

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re*

*Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claims 8-11, 13-17 and 19 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 3 and 5-7 of U.S. Patent No. 6,309,610. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims recites all the structures as claimed except for the intended use of the apparatus and the dielectric strength value of the fluoropolymeric dielectric. The specification of the patent discloses both the differences (see abstract and col. 7, line 18). As to the use disclosure of the patent in the rejection, the court has stated *in re Vogel* 164 USPQ 619 that those portions of the specification which provide support for the patent claims may be also examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent.

As to the provision of an inlet and outlet to the reactor as claimed in claim 11, such a provision would have been within the level of ordinary skill in the art because "the use of conventional materials to perform their known functions in a conventional process is obvious". In re Raner 134 USPQ 343.

As to the process limitation of each of claims 13-16 and 19, the use of the specification is again applied.

As to the subject matter of claim 17, the patent claim 7 recites a plurality of spacers, hence contemplate that more than two electrodes.


### ***Response to Arguments***

7. Applicant's arguments filed 18 February 2005 have been fully considered but they are not persuasive because of the detailed rejections as set forth in the paragraphs above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kishor Mayekar  
Primary Examiner  
Art Unit 1753